ABSTRACT OF THE DISCLOSURE

Disclosed is a thin film transistor substrate and a system for inspecting the same. The thin film transistor substrate comprises gate wiring formed on an insulation substrate and including gate lines, and gate electrodes and gate pads connected to the gate lines; a gate insulation layer covering the gate wiring; a semiconductor layer formed over the gate insulation layer; data wiring formed over the gate insulation layer and including data pads; a protection layer covering the data wiring; auxiliary pads connected to the data pads through contact holes formed in the protection layer; and a pad auxiliary layer formed protruding a predetermined height under the data pads. The inspection system for determining whether a thin film transistor substrate is defective, in which the thin film transistor substrate comprises gate wiring including gate lines, gate electrodes and gate pads, and data wiring including source electrodes and drain electrodes, includes a probe pin for contacting the gate pads or data pads and transmitting a corresponding signal, wherein a contact tip at a distal end of the probe pin for contacting the gate pads or the data pads is rounded, and a radius of the rounded contact tip is 2μm or less, or the rounded contact tip is coated with gold (Au).